



# **SANTA BARBARA COUNTY COMPREHENSIVE PLAN**

## **HAZARDOUS WASTE ELEMENT**

### **EXECUTIVE SUMMARY**

INSTITUTE OF GOVERNMENTAL  
STUDIES LIBRARY

MAR 11 1993

UNIVERSITY OF CALIFORNIA

**DECEMBER 1990**

**HAZARDOUS WASTE MANAGEMENT**

County of Santa Barbara  
Resource Management Department  
1226 Anacapa Street, 2nd Floor  
Santa Barbara, CA 93101  
(805) 568-2040



# **SANTA BARBARA COUNTY COMPREHENSIVE PLAN HAZARDOUS WASTE ELEMENT**

## **EXECUTIVE SUMMARY**

December 1990

Hazardous wastes have become a common by-product of our modern industrial society and an integral part of our growing economy. As such, it can be expected that our society will continue to use products which generate hazardous wastes. This emphasizes the need for proper management of current as well as future hazardous wastes with the goal of minimizing the amount of waste generated and reducing the hazard of what is generated. If environmentally sound and economically feasible waste management solutions are made available, the use of outmoded disposal practices will continue and public health and the environment will be threatened by a further increase in the illegal disposal of hazardous wastes.

Managing hazardous wastes in a prudent fashion is a complex problem that requires the cooperation of government, industry, and the public. The problem is complicated by the fact that there are a number of different types of wastes for which different management techniques are required. For example, some wastes such as solvents are well-suited to recycling whereas for others, only complex treatment techniques are currently available. Another difficulty in managing hazardous wastes is that these wastes are generated by a myriad of types and sizes of businesses, as well by individual households. For instance, in Santa Barbara County, waste generators include the oil and gas industry, electronics firms, schools, photo processing labs, as well as many types of service industries. Thus, feasible solutions must include the many diverse types of service industries. Thus, feasible solutions must include the many diverse types of wastes which are generated and must incorporate an educational campaign which is effective in reaching the broad array of hazardous waste generators.

At both the federal and state level, there are many statutes which have been adopted over the years to deal with various aspects of the hazardous waste problem. Many of the regulatory requirements set forth by federal and state legislation are implemented through local ordinances and programs. Despite the many statutes currently in effect to regulate hazardous waste, the California legislature recognized a pressing need for a comprehensive approach to hazardous waste management. In recognition of this need, the California legislature amended the Health and Safety Code in 1986 (Assembly Bill 2948). The purposes of the amendments are:

- o To assure the safe and responsible management of hazardous wastes;
- o To establish an effective planning process involving public and private sector participation for the management of hazardous wastes;



- o To prevent hazardous wastes from being permanently disposed into the land or air without being processed by an alternative technology; and,
- o To provide a more effective method of the siting of needed hazardous waste facilities.

The legislature recognized that these objectives could be accomplished best at the local level. Therefore, the statute authorized local governments in California to prepare a Hazardous Waste Management Plan. These plans will serve as the principal planning document for hazardous waste management at the local level. Upon their adoption, they will become an element of a County's Comprehensive Plan.

The approval process for the Hazardous Waste Management Plan differs from the process required for most County planning documents. The Plan must be approved by a majority of the cities within the County which contain a majority of the population of the incorporated area. On or before February 1, 1989, a final Hazardous Waste Management Plan which has been approved by the County and the cities must be forwarded to the State Department of Health Services. Once the State has approved the plan, the County has 180 days to incorporate the Plan into the County's Comprehensive Plan as the Hazardous Waste Management Element, and to enact an ordinance requiring all applicable zoning, subdivision, conditional use permit, and variance decisions to be consistent with the Plan.

The cities are also required to take action within 180 days of the Department of Health Services approval of the County Plan. Each city must do one of the following: 1) incorporate applicable portions of the County Hazardous Waste Management Plan, by reference, into the city's Comprehensive Plan; or 2) adopt a City Hazardous Waste Management Plan which is consistent with County's Plan; or 3) enact an ordinance which requires that all applicable zoning, subdivision, conditional use permit, and variance decisions are consistent with applicable portions of the County's Plan.

The Santa Barbara County Resource Management Department began preparation of the Hazardous Waste Management Plan (HWMP) in 1987. The intent of the County in preparing the HWMP is to develop a comprehensive plan for the management of hazardous waste in the County. It is a product not only of staff effort, but of the assistance provided by an Advisory Committee and public input received throughout the preparation of the Plan. Through this combined effort, goals and policies have been developed to address the major issues associated with the management of hazardous wastes in Santa Barbara County.

The information below is a summary of each of the chapters of the HWMP. A complete list of the goals, policies and implementation programs follows each chapter summary.



## **1.0 INTRODUCTION**

The following goals and policies are based on the goals of Assembly Bill 2948. These general goals and policies provide the framework for the more specific policies and programs that are contained in subsequent chapters of the HWMP.

### **Goals**

- 1-1 To protect the health and welfare of the public, the environment, and the economy of Santa Barbara County through a comprehensive program that ensures safe and efficient management of hazardous wastes.
- 1-2 To prevent hazardous waste from being permanently disposed into land or emitted into the air or water without being processed by an economically and technically feasible technology so as to protect public health and safety and the environment.
- 1-3 To promote hazardous waste minimization to reduce the need for new hazardous waste facilities.
- 1-4 To ensure that the general public and industry is involved in the siting of hazardous waste facilities and is informed about legislation and regulations regarding hazardous waste management.
- 1-5 To identify and promote safe, effective, economical, and feasible methods for managing the hazardous waste generated in the County.

### **Policies**

- 1-1 The County and cities shall work together with the state, the public, and industry to establish a comprehensive planning process in order to develop safe and responsible solutions for the management and disposal of hazardous waste.
- 1-2 The County and cities shall work together to develop and implement programs that reduce the amount and hazard of the hazardous wastes generated in the County.
- 1-3 The County shall continue its involvement with the Southern California Hazardous Waste Management Authority to establish comprehensive and equitable hazardous waste management on a regional basis.
- 1-4 The County and cities shall work with the Southern California Hazardous Waste Management Authority and the state to address regional and statewide planning issues as needed to achieve environmentally and economically effective hazardous waste management on local, regional, and statewide basis.
- 1-5 The County and the cities shall review the Hazardous Waste Management Plan every three years to update the data assessment and to make policy changes as appropriate. Future revisions of the Hazardous Waste Management Plan should include hazardous materials as well as wastes.



## 2.0 HAZARDOUS WASTE DATA ASSESSMENT

A key component in the development of a comprehensive hazardous waste management plan is an assessment of the types and amounts of waste generated in the County. The data analysis includes estimates of current and projected waste generation by large quantity generators, small quantity generators, and households. It also includes estimates of waste generation due to the cleanup of contaminates sites and a needs assessment for hazardous waste treatment and disposal capacity for wastes produced within the County. The baseline year for evaluating hazardous waste generation is 1986.

Hazardous wastes are generated from a wide variety of activities in our society ranging from large industrial processes to home cleaning activities. The sources of hazardous waste generated in the County can be divided into three categories. They include industrial waste (including both large and small quantity generators), household waste, and cleanup waste (from leaking underground tanks and other contaminated sites). In 1986, an estimated 30,536 tons of wastes were produced. Of this amount, approximately 53% (16,226 tons) was generated by industries, 4% (1,070 tons) by households, and 43% (13,240 tons) from cleanup activities.

A projection of hazardous waste generation was made to the year 2000. The amount of waste generated in the year 2000 is projected to be 30,693 tons - 95% (29,290 tons) from industrial sources, 4% (1,303 tons) from households, and 1% (100 tons) of contaminated soils. The projection of the amount of waste generated from industrial sources is lowered if waste minimization and recycling are incorporated into the projection.

An analysis of the need for treatment, storage, and disposal facilities to manage the hazardous waste generated in the County was done for wastes generated in the years 1986 and 2000. This needs analysis was carried out for different scenarios which varied in the assumptions made regarding recycling and waste minimization. Based on the needs analysis, there may be an adequate waste stream at the present time to justify a small recycling facility in the County.

Evaluation of the need for hazardous waste facilities in the year 2000 is complicated by a number of factors. It is clear, however, that waste minimization can play a critical role in evaluating the need for hazardous waste facilities. When estimates of waste minimization are incorporated into projections of future hazardous waste generation, the amount of waste generated is not sufficient to justify siting any type of hazardous waste facility in the County. Small amounts of waste would still need to be treated and disposed, but these could be handled through onsite facilities or as part of a regional facility. When waste minimization is not incorporated into the projections of future waste generation, there may be enough waste generated to warrant a small aqueous treatment facility, recycling facility, and residual repository. If Casmalia Resources remains operational, additional facilities for aqueous treatment and residual disposal would not be necessary, but a need would remain for a small recycling facility.



## Goal

- 2-1 To have a comprehensive data base for information on hazardous waste generation and hazardous waste treatment and disposal capacity within the County.

## Policies

- 2-1 No specified hazardous waste facility shall be sited within the County or cities unless needed. The need for a specified hazardous waste facility project must be established by the project applicant and determined by the local jurisdiction at the time of the local land use decision, consistent with fair share principles based on the responsibility of local governments to assure that adequate treatment and disposal capacity is available to manage the hazardous wastes generated within their jurisdiction. Conformance with the siting criteria in this Plan does not in itself establish need. The following factors shall be considered in determining the need for a facility:
- a) the extent to which the proposed facility would exceed the county or city's "fair share", as defined by reference to the principles and formulas adopted by the Southern California Hazardous Waste Management Authority;
  - b) the economic viability and the public health, safety, and environmental risks associated with the proposed facility and alternative operating capacities of the proposed facility;
  - c) the extent to which the county or city has or, within a reasonable amount of time, will have facilities to manage county or city generated hazardous wastes; and
  - d) the extent to which intergovernmental or private agreements demonstrate that one or more California counties or cities have facilities, or will accept the siting of new or expanded facilities, to manage the county or city generated hazardous wastes.
- 2-2 All businesses that generate hazardous wastes including home occupations, but excluding normal household activities, shall provide the County with information regarding the type, amount and management of all hazardous wastes generated. Such information shall be required as part of the EHD hazardous waste generator permit program and shall be updated annually.
- 2-3 All hazardous waste treatment, storage, and disposal facilities in the County shall provide the County with information regarding their operations and treatment, storage, and disposal capacity. Such information shall be updated annually.

## **Implementation Programs**

### **2-A Comprehensive Data Management System**

Continue to work toward a comprehensive data management system that includes: data on hazardous waste management such as waste generation, storage of hazardous waste, underground tanks, and contaminated sites; provision for maintaining current data; and procedures for collecting consistent information. The program should interrelate other existing programs using a computerized data base as much as is feasible. As an example, information could be gathered through the EHD hazardous waste generator program. Standard information, such as Standard Industrial Classification (SIC) codes and state identified waste groups, should be used so that data are comparable. This program should reference and integrate as appropriate other data collection programs such as those recommended for small quantity generators (implementation program 5-A), and the waste stream analysis (implementation program 6-E). A data management coordinator is needed in the Environmental Health Division to coordinate development and maintenance of the program.

### **2-B Permit Process Guidelines for Generators**

Prepare guidelines identifying the permit process for generators of hazardous waste. Procedures should be developed for both discretionary and ministerial projects and should address both environmental health and land use permits. This should include proper review of hazardous waste generator projects by the Environmental Health Division prior to land use approval by the County or cities.



### 3.0 SITING ANALYSIS

State legislation (AB 2948, 1986) amended the Health and Safety Code to require each county to take responsibility for the hazardous waste generated within that county. This involves first, promoting waste minimization measures to reduce the amount of waste generated and disposed, and second, assuring the availability of adequate facilities for the transfer, storage, treatment, recycling, and disposal of wastes generated in the county. Chapter 2 of the HWMP presents an analysis of available data regarding current and projected hazardous waste generation within Santa Barbara County and estimates the need for facilities to manage these wastes. Because limited data is available and other unpredictable factors may influence future needs, the determination of the need for a hazardous waste facility must be made at the time a facility is proposed. The discussion of siting a hazardous waste facility in the HWMP, therefore, is not limited to any specific type of facility. Developing siting criteria and defining the permitting procedures for all types of facilities is necessary to maintain local jurisdiction in the future. If an appeal is filed against a local decision on a hazardous waste facility project, it will be evaluated by a state appeals board based on consistency with the HWMP. Section 24135.4(a) of the California Health and Safety Code states that "No person shall establish or expand an offsite facility, unless the legislative body of the city or county in which the new offsite facility or the expansion of an existing facility is proposed makes a determination that the facility is consistent with the county hazardous waste management plan."

Section 25135.1(d) of the California Health and Safety Code requires the County Hazardous Waste Management Plan (HWMP) to include an identification of general or specific sites for new hazardous waste facilities, or instead, to include siting criteria to be used in selecting sites for new hazardous waste facilities and designate general areas where the criteria might be applicable. It would be inappropriate to identify general or specific sites for new hazardous waste facilities without detailed site-specific information including a risk assessment and environmental review. Therefore, siting criteria have been developed to evaluate potential sites at the time a project is proposed.

The siting criteria were developed based on the criteria recommended by the State Department of Health Services in the *Guidelines for the Preparation of the HWMP*. The intent of the criteria is to protect residents of Santa Barbara County, ensure structural stability of the facility, protect surface and groundwater quality, air quality, significant resource areas, and ensure safe transportation of hazardous waste. The siting criteria are presented in Table 3-3 of the HWMP, and are included after the goals, policies, and programs below. At the time a hazardous waste facility is proposed, the siting criteria along with existing county or city policies will be used to evaluate the appropriateness of the project location. This is specified in Policy 3-2.

The following goals and policies define the use and applicability of the siting criteria and outline a process for evaluating proposed hazardous waste facilities.



## **Goal**

- 3-1 To site needed hazardous waste facilities in areas that ensure the protection of public health and safety and the environment.

## **Policies**

- 3-1 The County and cities shall establish an efficient siting and permitting process that provides for needed hazardous waste facilities in areas which pose the least threat to public health and safety and the environment, and includes extensive public input to aid in selecting sites.
- 3-2 The siting criteria, along with existing land use policies, shall be used by the County, cities, and other permitting jurisdictions in determining the suitability of siting specified hazardous waste facilities on any lands within the County, including the cities.
- 3-3 The County and cities shall encourage the development of onsite facilities for the treatment or recycling of hazardous wastes.
- 3-4 The County and cities shall not approve any specified hazardous waste facility for which a significant fiscal deficit on the local jurisdiction is projected without incorporation of adequate mitigation to reduce the fiscal shortfall to insignificance.

## **Implementation Programs:**

### **3-A Permit Process Guidelines for Specified Hazardous Waste Facilities**

Develop guidelines that identify the requirements of applications for specified hazardous waste facilities, outline the permit process for these facilities, and discuss the environmental review process. Procedures should be developed to ensure proper review of hazardous waste facility projects by the Environmental Health Division prior to land use approval by the County or cities.

### **3-B Amendments to Zoning Ordinances**

Amend County and City zoning ordinances to be consistent with this Plan. Establish hazardous waste facility and residuals repository overlay designations, conditional use permit classifications, and corresponding application requirements, project review requirements, and standards for assessing the suitability of a particular project and site. These requirements shall include, but not be limited to, the items listed below.

#### **1. Application Requirements**

- a. In order to ensure that proposed facilities are appropriately sited, applicants for hazardous waste facilities shall submit preliminary information regarding the proposed facility to the County before a



formal application is accepted. The information shall be submitted in the form of a pre-application assessment that provides a detailed project description, an evaluation of alternative sites for the project, and a discussion of how the proposed project meets the siting criteria and the policies of this Plan.

## 2. Project Review Requirements

- a. The siting criteria shall apply to all new or expanded specified hazardous waste facilities. Site specific information shall be used to evaluate the consistency of a proposed project with the siting criteria. Consistency will be determined during the environmental review process.
- b. A risk assessment shall be required. The purpose of the risk assessment is to estimate the level of risk to human health and the environment. Sufficient detail should be provided so that decision-makers will have an adequate basis from which to consider alternatives. The risk assessment shall include, but not be limited to, the following items:
  1. the use of worst case incident scenarios;
  2. the identification of the maximum volumes expected of different classes (or types) of hazardous materials or waste;
  3. the identification of physical and chemical characteristics of the wastes that will be handled;
  4. a discussion of the size and compositions of any residential or populated areas nearby and the potential for impacting these areas;
  5. an evaluation of potential impacts to air quality, water resources, crops, vegetation, and wildlife;
  6. an evaluation of the project's effect on immobile populations;
  7. an analysis of emergency response capabilities;
  8. an evaluation of emissions from routine operations;
  9. the evaluation of different transportation options; and
  10. a discussion of the detection and monitoring systems, auditing and inspection programs, and other risk reduction controls with regard to protection of human health and the environment.

- c. An air quality assessment shall be conducted of the project's impact on air quality, including an analysis of whether emissions from the facility would significantly contribute to non-attainment of standards, consideration of mitigation measures, and an analysis of projected emissions of the facility as compared to emissions associated with the transport of materials out of the County. The assessment shall also include analysis of toxic air contaminant emissions and releases.
- d. A water quality assessment shall be conducted of the project's possible adverse impacts on local ground and surface water resources arising from routine discharges, leakage or accidental spillage of waste at the site. These assessments shall include but not be limited to possible impacts to drinking water supplies.
- e. A site characterization and geotechnical investigation shall be conducted to evaluate geologic hazards and other disaster potential. This shall include but not be limited to assessment of soils, faults, slopes, landslide potential, ground and surface waters, and floods.
- f. Architectural and visual analysis shall be required and recommendations incorporated into project design to protect views and vistas, ridgelines, coastlines, etc. Architectural review criteria shall be applicable to all proposed facilities.
- g. An assessment shall be conducted of the project's expected demand for water, sewer, and energy. This must include a discussion of the availability of these systems, and conservation measures incorporated into project design.
- h. The net fiscal impact of the proposed facility on affected jurisdiction(s) shall be determined. Potential mitigations for significant fiscal impacts can include, but are not limited to, assessment districts, hookup fees, and increases in annual permit and monitoring charges.

### 3. Development Standards

- a. A buffer adequate to protect the public and sensitive environmental areas will be required based on a thorough assessment of risk to public health and safety.
- b. A risk management and prevention plan (RMPP) shall be required to incorporate proper risk reduction measures into the design and construction of a facility. The RMPP shall be prepared in accordance with the guidelines provided pursuant to the California Health and Safety Code, Chapter 6.95, and must be approved prior to operations.



- c. All hazardous waste facilities shall comply with APCD rules and regulations and be consistent with the Air Quality Attainment Plan.
- d. All hazardous waste facilities must be designed and constructed to be able to contain spills, leaks, and other accidental releases of waste. This containment shall provide protection to surface and ground water resources, protection to air quality where appropriate, and shall be based on the site characterization and geologic report.
- e. Availability of public services (water, sewer, utilities) is required for hazardous waste treatment, recycling, transfer, and storage facilities in urban areas. Onsite, private services are allowed only when these facilities are needed to serve local demand in rural areas, or the size and type of facility is determined inappropriate for urban areas. Onsite, private services shall be designed to accommodate expected demand and to protect environmental resources.

Onsite, private services are allowed for residuals repositories if designed to accommodate expected demand and to protect environmental resources.
- f. Project construction shall include mitigation of construction impacts including but not limited to dust suppression, emissions control, sedimentation control, and restricted construction hours.
- g. The design of any hazardous waste facility shall include measures for adequate site security including enclosing the site with a fence or wall.
- h. Grading and alteration of natural drainages shall be minimized.
- i. Adequate provisions shall be made to prevent erosion and flood damage.
- j. All lights shall be shielded so that all lighting is confined to the project site.
- k. The facility shall be visually compatible with the existing and anticipated surroundings by use of any or all of the following measures where applicable: buffer strips, landscaping to screen the facility and painting to camouflage or blend with the surrounding area.
- l. No noxious odors associated with the facility shall be detectable at the property boundary.
- m. The level of noise generated by the facility at or beyond the property boundary shall not exceed 70db(A).

- n. A monitoring system to measure offsite impacts, including noise, vibration, odor, and air and water quality degradation, shall be required as a condition of approval.

### 3-C Provisions for Onsite Hazardous Waste Facilities

Evaluate the need to amend the zoning ordinance to allow onsite hazardous waste treatment, recycling, storage, or disposal facilities, including transportable treatment units (TTUs). This includes determining the need for special permit procedures and zoning designations.



**TABLE 3-3**

**SITING CRITERIA  
FOR OFFSITE COMMERCIAL HAZARDOUS WASTE FACILITIES**

**I. PROTECT RESIDENTS OF SANTA BARBARA COUNTY**

**A. Public Safety Distance from Residences**

A minimum buffer zone of 2,000 feet from residences shall be required for any hazardous waste residuals repository unless it is demonstrated to the satisfaction of the County or City, and the State Department of Health Services, that a buffer zone of less than 2,000 feet is sufficient to protect the present and future public health and safety, and the environment. A risk assessment shall be required and shall consider the physical and chemical characteristics of the specific type of wastes that will be handled, the design features of the facility, and other factors to determine the size of the buffer needed to protect residences and other sensitive areas from potential accidents or from adverse emissions from a proposed facility.

A risk assessment shall be required for treatment, recycling, storage and transfer facilities and shall consider the physical and chemical characteristics of the specific type of wastes that will be handled, the design features of the facility, and other factors to determine the size of the buffer needed to protect residences and other sensitive areas from potential accidents or from adverse emissions from a proposed facility.

Residences shall include but not be limited to existing residences, land areas zoned for residential use, hotels, motels, and other temporary housing facilities.

**B. Distance from Immobile Populations**

A minimum buffer zone of 2,000 feet from immobile populations shall be required for any hazardous waste residuals repository unless it is demonstrated to the satisfaction of the County or City, and the State Department of Health Services, that a buffer zone of less than 2,000 feet is sufficient to protect the immobile population. A risk assessment shall be required and shall consider the physical and chemical characteristics of the specific type of wastes that will be handled, the design features of the facility, and other factors to determine the size of the buffer needed to protect immobile populations and other sensitive areas from potential accidents or from adverse emissions from a proposed facility.

A risk assessment shall be required for treatment, recycling, storage and transfer facilities and shall consider the physical and chemical characteristics of the specific type of wastes that will be handled, the design features of the facility, and other factors to determine the size of the buffer needed to protect immobile populations and other sensitive areas from potential accidents or from adverse emissions from a proposed facility.

Immobile populations include schools, hospitals, convalescent homes, prisons, facilities for the mentally ill, and other facilities which have limited potential for evacuation.

**C. Proximity to Large Numbers of People in Public or Private Areas**

Hazardous waste facilities shall be sited so as not to cause significant, adverse impacts to the public health and safety of people in public or private areas. The appropriate buffer shall be determined as a part of the risk assessment.

**D. Availability of Emergency Services**

Hazardous waste facilities shall be located where served by fire departments trained to deal with hazardous materials accidents and where response times are the same or better than those recommended by the National Fire Protection Association unless it is demonstrated to the satisfaction of the County or City that comparable emergency response capabilities will be available onsite. Additional emergency services, design, and equipment may be required based on the risk assessment and the risk management and emergency response plans.

**E. Zoning Restrictions**

Residuals repositories are long term uses of large areas of land and shall be located only by conditional use permit in areas found to be suitable for a hazardous waste residuals repositories overlay zoning designation.

Hazardous waste treatment, recycling, transfer, and storage facilities shall be located only by conditional use permit in industrial zoned areas, or by conditional use permit in non-industrial areas found to be suitable for a hazardous waste management facility overlay zoning designation. The overlay designation shall be used only for facilities necessary to serve generators outside industrial areas, or if findings are made that the proposed site is a preferred alternative when evaluated according to the policies and siting criteria of the HWMP and compared to alternative locations within the industrial boundaries.



## **II. ENSURE THE STRUCTURAL STABILITY OF THE FACILITY**

### **A. Flood Plains**

Residual repositories shall not be located in areas subject to 100-year flooding. This includes areas subject to flooding by dam or levee failure and natural causes such as river flooding, rainfall or snowmelt, tsunamis, seiches, and coastal flooding.

Hazardous waste treatment, recycling, transfer, and storage facilities shall not be located in areas subject to 100-year flooding unless it is demonstrated to the satisfaction of the County or City that the facility is designed, constructed and maintained to preclude failure in the event of a flood. This includes areas subject to flooding by dam or levee failure and natural causes such as river flooding, rainfall or snowmelt, tsunamis, seiches, and coastal flooding.

### **B. Seismic**

Hazardous waste facilities shall not be located within 200 feet of an active or recently active fault as defined in the California Code of Regulations (CCR), Title 22, Section 66391(a) (11) A (1) and (2)).

### **C. Unstable Soils**

Residuals repositories shall not be located in areas of potential rapid geologic change.

Hazardous waste treatment, recycling, transfer and storage facilities shall not be located in areas which have unstable soils or severe geological constraints unless it is demonstrated to the satisfaction of the County or City that engineering design features will assure structural stability. Such areas shall be determined by a geological report and may include but are not limited to steep slopes and areas subject to liquefaction and subsidence due to natural causes. Areas requiring extensive grading should be avoided.

## **III. PROTECT SURFACE AND GROUNDWATER QUALITY**

### **A. Drinking Water Supplies**

Hazardous waste facilities shall not be located in areas where the maximum credible accident or natural disaster, or non-accidental releases and emissions, would cause significant, adverse impacts to drinking water supplies. The maximum credible event shall be determined by the risk assessment and shall consider at a minimum: proximity to surface waters and recharge areas, depth to groundwater, soil permeability, geology, structural stability, spill containment features, inspection and monitoring measures, emergency response, and other mitigating controls.

Drinking water supplies include but are not limited to reservoirs and potable groundwater aquifers; surface waters and groundwater basins recharging reservoirs and potable groundwater aquifers; and shall include water resources that may reasonably be developed in the future for drinking water supplies.

**B. Surface and Groundwater Quality**

Hazardous waste facilities shall not be located in areas so as to cause significant, adverse impacts to the quality of surface or groundwater resources, including but not limited to groundwater basins, nearby streams or drainage channels, wetlands, and the ocean.

**C. Depth to Groundwater**

Residuals repositories and other facilities with subsurface storage or treatment shall not be located where the depth to groundwater, permeability of overlying geological materials, and other natural features do not provide natural protection capable of containing waste and leachate as a backup to primary containment.

Hazardous waste treatment, recycling, storage, and transfer facilities shall not be located in areas where the depth to groundwater, permeability of overlying geological materials, and other natural features do not provide natural protection unless the engineering design and construction of the facility and containment structures are capable of precluding significant, adverse impacts to groundwater.

**D. Major Recharge Areas for Aquifers**

Residual repositories shall not be located within areas known or suspected to be supplying principal recharge to a regional aquifer as defined in adopted general, regional, or state plans.

Treatment, recycling, storage, and transfer facilities shall not be located within areas known or suspected to be supplying principal recharge to a regional aquifer as defined in adopted general, regional, or state plans unless facilities provide properly engineered spill containment features, inspection and monitoring measures, and other environmental protection controls. Facilities should not be permitted where permeable strata and soils overlie a major recharge area.

**E. Permeability**

Residuals repositories and other facilities with subsurface storage and treatment shall not be located in areas of high permeability.



Treatment, recycling, storage and transfer facilities shall not be located in areas of high permeability unless facilities provide properly engineered spill containment features, inspection and monitoring measures, and other environmental protection controls.

Areas of high permeability shall be determined by the County or City in conjunction with the Regional Water Quality Control Board after assessment of individual site characteristics identified in the geological report.

**F. Water Wells**

Hazardous waste facilities shall not be located within the surface or subsurface area surrounding a water well or wellfield supplying a public water system, through which contaminants are reasonably likely to move toward and reach such water well or wellfield. These areas shall be designated by the County or City after consideration of such factors as well pumping rates, time-of-travel of groundwater flowing to the well, aquifer boundaries, and degree of confinement.

**IV. PROTECT AIR QUALITY**

**A. Nonattainment and Prevention of Significant Deterioration Areas**

Hazardous waste facilities shall not be located in Non-Attainment (NA) or Prevention of Significant Deterioration (PSD) areas unless they meet APCD requirements and are consistent with the Air Quality Attainment Plan. Hazardous waste facilities shall not be located within Class I areas as identified in the Clean Air Act or near or within wilderness areas, national parks, memorial areas, and similarly dedicated areas.

**V. PROTECT ENVIRONMENTALLY SENSITIVE AREAS**

**A. Wetlands**

A minimum buffer zone of 1,000 feet from wetlands such as estuaries, fresh water and brackish marshes, and stream corridors, as defined in adopted general, regional, or state plans, shall be required for all hazardous waste facilities unless it is demonstrated to the satisfaction of the County or City that a smaller buffer zone will not pose significant, adverse impacts to the wetland.

**B. Habitat of Critical or Significant Species**

A minimum buffer zone of 1,000 feet from critical or significant habitat areas shall be required for all hazardous waste facilities unless it is demonstrated to

the satisfaction of the County or City that a smaller buffer zone will not pose significant, adverse impacts to these areas.

Critical or significant habitat areas include but are not limited to habitats of animal and plant species identified or being considered for identification as "endangered" or "threatened" by the U.S. Department of Interior or the State of California, and species or communities which are not endangered on a state or national scale but are identified by the County or cities as locally rare or unique.

**C. Prime Agricultural Lands**

Hazardous waste facilities shall not be sited on prime agricultural lands, as defined in California law and local land use plans, unless an overriding public need is served and demonstrated.

**D. Recreation, Cultural, or Aesthetic Areas**

Hazardous waste facilities shall not be located in recreation, cultural, or aesthetic areas except low volume transfer and storage facilities necessary to handle hazardous wastes generated by visitors, workers, or residents within these areas. Such facilities may only be sited in these areas if no feasible alternative location exists.

Protected areas include but are not limited to state, county, and city parks; historical and archeological sites; scenic highways; public and private preservation areas; and areas identified in County and City plans as significant visual resources.

**E. Mineral Resource Areas**

Hazardous waste facilities shall not be sited so as to preclude extraction of minerals necessary to sustain the economy of the state.

**VI. ENSURE SAFE TRANSPORTATION OF HAZARDOUS WASTE**

**A. Reduce Travel Through Residential Areas**

All hazardous waste facilities shall be located so that road networks leading to major transportation routes minimize residential exposure, except low volume transfer and storage facilities necessary to handle waste generated in residential areas, and shall be demonstrated to be safe with regard to road design and construction, accident rates, excessive traffic and other factors needed to assure safety.



**B. Reduce Distance from Major Routes**

All hazardous waste facilities shall have safe access to major transportation routes. Facilities should be located to minimize distances to major transportation routes and shall be serviced by roads designed, upgraded, or constructed to accommodate the volume and weight of traffic proposed.

**C. Proximity to Waste Generation Stream**

Residuals repositories may be located more distant from waste generation sources because of their long term need for larger land areas and buffer zones.

Hazardous waste treatment, recycling, storage, and transfer facilities should be located close to waste generation sources to minimize the risks of transportation.





## **4.0 WASTE MINIMIZATION**

The primary mechanism for reducing the impacts of hazardous waste is to reduce the amount of waste being generated. This can most effectively be done through the implementation of a waste minimization program that requires, in order of priority, source reduction, recycling, and onsite treatment. This waste minimization hierarchy should be implemented by all generators of hazardous waste. Implementation of a waste minimization program will decrease the amount of hazardous waste that is generated and will lower the hazard associated with what is produced. In many cases it will also reduce the cost of waste management to industry. However, many generators of hazardous waste lack information about source reduction procedures, options for recycling or technologies for onsite treatment. This information and technical expertise can be provided through a local waste minimization program. A program that emphasizes source reduction and recycling can lower waste management costs by reducing raw material cost, hauler fees, and waste disposal fees. Source reduction and recycling may also provide savings by reducing future liability associated with disposal of hazardous wastes.

### **Goals**

- 4-1 To have all hazardous waste generators implement waste minimization procedures to the maximum extent feasible.
- 4-2 To have all the cities in the County adopt a policy encouraging source reduction, recycling, and onsite treatment.

### **Policies**

- 4-1 The County and the cities shall encourage and promote practices and technologies that will, in order of priority: 1) reduce the use of hazardous substances and the generation of hazardous wastes at their source; 2) recover and recycle the remaining hazardous wastes for reuse; and 3) treat those wastes not amenable to source reduction or recycling so that the environment and community health are not harmed by their ultimate release or disposal.
- 4-2 The County in conjunction with the cities shall develop a hazardous waste minimization program to provide adequate information and technical assistance to all hazardous waste generators to ensure that all generators have knowledge of regulatory requirements and effective waste minimization procedures.
- 4-3 All new or modified land use permits for facilities that generate hazardous waste shall incorporate waste minimization techniques to the maximum extent economically and technically feasible. New applicants shall be required to submit this information as part of their permit application. This policy shall apply to both discretionary and ministerial land use permits.

- 4-4 The County and the cities shall implement hazardous waste minimization techniques in all County and city activities that generate hazardous waste to the maximum extent technically and economically feasible, and shall cooperate with and encourage other agencies in implementing hazardous waste minimization techniques.

## **Implementation Programs**

### **4-A Waste Minimization Program**

A waste minimization program is central for effective hazardous waste management in the County. The five components of such a program include educational materials, technical assistance, economic incentives, regulatory measures, and recognition of achievements. The scope and target of the waste minimization program should be identified prior to implementation and should be reviewed periodically to ensure effective implementation. Whenever possible, the various aspects of this program should address the needs of small quantity generators and should be integrated with the small quantity generator information program recommended as implementation program 5-B.

Educational materials and technical assistance should be the first priority of the waste minimization program. Such information and assistance provide the necessary structure for assisting generators with implementing waste minimization techniques. Providing educational materials and technical assistance has been the key to successful programs in other counties. Economic incentives, recognition measures, and certain regulatory measures should also be included to encourage participation, but these components are a lower priority. The County Environmental Health Division will be the lead agency implementing the waste minimization program. Other local agencies may become involved with some components of the program such as education and recognition. The proposed program is outlined below.

#### **1. Educational Materials**

- a. Develop and maintain a local waste minimization library by compiling existing information on waste minimization procedures, technologies for recycling and waste-exchange programs, and regulatory requirements.
- b. Collect and disseminate existing information that explains waste minimization, recycling and waste-exchange programs, and regulatory requirements.
- c. Distribute DOHS self-audit guidelines to appropriate local generators.
- d. Encourage trade associations and local Chambers of Commerce to form an industry task force to promote information exchange and technology transfer.



- e. Form a government-industry-public task force to evaluate the scope and target of the waste minimization program and to identify the best means to promote waste minimization techniques.
  - f. Prepare and distribute fact sheets, brochures, or handbooks on waste minimization procedures and technologies applicable to local generators.
  - g. Develop a guide for hazardous waste regulatory requirements and permit application requirements.
  - h. Co-sponsor workshops or conferences with other organizations such as the Chamber of Commerce, the University, the Local Government Commission, or DOHS.
2. Technical Assistance
- a. Train local inspection staff in waste minimization techniques so that information can be given during routine inspections as time allows (requires no additional staff).
  - b. Support a waste minimization specialist to provide onsite technical consultation.
  - c. Expand existing staff so that waste reduction consultation is actively incorporated into the existing inspection program (requires additional staff).
  - d. Seek grants or other funding for a waste-reduction technical assistance demonstration project (e.g., program to create a revolving-loan fund for small generator waste minimization activities and provide low-cost waste-reduction, consultation to targeted generators).
  - e. Establish a "work-study" program in conjunction with the University to have engineering students provide waste minimization consultation to generators.
3. Economic Incentives
- (To be identified.)
4. Regulatory Measures
- a. Integrate waste minimization requirements into permits for development or as standard permit conditions.

- b. Require local generators to submit to the County Environmental Health Division the waste minimization plans that are required under RCRA.
- c. Require approval of a waste minimization plan as a prerequisite to any financial incentive.
- d. Require a waste minimization plan for any local government operation that generates hazardous waste.
- e. Require approval of a waste minimization plan as a condition for renewal of a permit or business license.
- f. Increase enforcement of all existing waste management and waste minimization requirements.

#### 5. Recognition

- a. Letters of commendation from the Board of Supervisors or City Councils to firms that have achieved notable success in reducing hazardous wastes.
- b. Certificates to firms that voluntarily develop effective waste minimization programs.

#### 4-B Permit Requirements for Waste Minimization

- 1. Amend the Zoning Ordinance to require all generators of hazardous wastes to 1) obtain a generator permit from the Environmental Health Division, and 2) incorporate waste minimization techniques to the maximum extent economically and technically feasible. Permit applications should be modified to require a waste minimization plan as part of the application requirements. This will apply to both discretionary and ministerial although the level of information requested will differ. Discretionary projects may be required to submit a more detailed waste minimization plan as a condition of project approval.
- 2. Develop guidelines and procedures for: 1) reviewing waste minimization plans required as part of permit applications, and 2) guidelines for approving these plans. This will include developing a checklist to identify small generators that are permitted ministerially.



## **5.0 SMALL QUANTITY GENERATORS**

Small quantity generators (SQGs) are business establishments that produce less than 1,000 kilograms (2,200 lbs) of hazardous waste per month. Most of the small quantity generators are involved in service industries such as dry cleaning, vehicle maintenance, photographic processing, and painting. The remainder are involved in manufacturing industries. Although there are a large number of small quantity generators, studies at national and local levels indicate that small quantity generators are only responsible for a small percentage of the total quantity of hazardous waste produced. Despite their small contribution to the total quantity of hazardous waste produced, there is a growing concern regarding the impact of the small quantity generators on human health and the environment. This concern stems from the recognition that, due to services that they provide, small quantity generators tend to be located in closer proximity to residential neighborhoods than large quantity generators; the waste characteristics of small quantity generators can have a high hazard potential; and many of these generators are involved in illegal disposal practices such as disposal to sewers and municipal landfills.

There is also a growing awareness that hazardous waste management needs of small quantity generators are different from those of large generators. Although the basic problems faced by SQGs are similar to those of large generators (increasing costs of disposal and complex regulations), the solutions to these problems may be different for small businesses with few staff and little expertise in hazardous waste management issues. Solutions must be developed in a manner that will be of use to the small generator.

The following goals and policies are intended to provide a framework for addressing the needs and problems of small quantity generators with respect to hazardous waste management. The special needs of small quantity generators stem from a lack of information and the lack of economically viable alternatives for the collection, treatment, and disposal of hazardous wastes. Policies and programs for waste minimization also address the needs of small quantity generators (see Chapter 4).

### **Goal**

- 5-1 To have safe and economical collection, treatment, and disposal of hazardous wastes generated by small quantity generators.

### **Policies**

- 5-1 All hazardous waste management programs and policies of the County and cities shall consider the special needs of small quantity generators and shall incorporate measures to address these needs. In particular, the waste minimization program required by Policy 4-2 shall include information on the implementation of waste minimization by small quantity generators.

- 5-2 The County and cities should encourage the establishment of transfer stations and collection services as needed to provide a safer and more economical means for small quantity generators to dispose of their waste. Such transfer stations and collection services should be integrated with the waste minimization program required by Policy 4-2 whenever possible.

## **Implementation Programs**

### **5-A SQG Data Assessment**

To most efficiently address the needs of SQGs, more detailed information is needed on the number, type, and size of these generators in the County. Existing programs, such as the Hazardous Waste Generator Permit Program (administered by the Environmental Health Division) should be used to gather such information. The type of information that should be collected includes location of generators, waste types and quantities generated, and current waste management practices and needs. The information should be standardized to be compatible with a comprehensive County data management system. Standardization should include the use of Standard Industrial Codes for each generator and use of the waste groups identified in the HWMP. This information can be used to assess the effectiveness of hazardous waste management programs for SQG. This program should be integrated with the comprehensive data management system proposed as implementation program 2-A.

### **5-B SQG Information Program**

Based on the information collected in Program 5-A, educational materials on hazardous waste management can be more specifically geared to the needs of SQGs in the County. This program should be integrated with the educational component of the Waste Minimization Program but may need to be expanded to address other aspects of hazardous waste management. These aspects may include information on storage, handling and shipping; underground tank regulations; waste haulers; treatment and disposal facilities; and financial assistance.

### **5-C Transfer Stations and Collection Services**

The need and feasibility of a transfer station on the south coast should continue to be addressed as identified in the "Report on a Household and Small Business Hazardous Waste Transfer Station" prepared for the County of Santa Barbara by the Community Environmental Council, Inc. (CEC). The County shall continue to work with CEC and other interested organizations to locate a site for a permanent collection and transfer facility for hazardous wastes generated by SQG's and households. In addition, the County shall identify sources of funding for such a facility, such as revenues from Casmalia Resources and assistance from affected Sanitation Districts, and oversee the operation of the facility on an experimental basis as long as funding is available. The need for collection services and additional transfer stations in other areas of the County should also be evaluated.



## **6.0 HOUSEHOLD HAZARDOUS WASTES**

Household hazardous waste are generally taken to be any household wastes which could harm people or the environment. Nearly every household produces wastes that can be considered hazardous. These wastes are generated from such common activities as cleaning, gardening, and automobile maintenance. Typical examples include oven cleaners, pesticides, antifreeze, and motor oil.

The use and disposal of hazardous products in the home has become an important issue because of the potential for impacts from the cumulative effect of improper disposal to municipal landfills, the sewer system, or illegal dump sites. Improper use and storage of such products can be dangerous to householders and disposal of these products into the trash can result in injuries to refuse haulers and disposal site personnel. When disposed in landfills, hazardous wastes from households can leak into the groundwater, contribute to air pollution, or disrupt the decomposition of the refuse. When improperly dumped down the drain or into the gutter, these wastes can damage sewer treatment plants and result in the release of untreated sewage into rivers and the ocean.

To address the problem, the policies and programs proposed in the Hazardous Waste Management Plan call for the County to continue to sponsor the collection days currently being held. In addition, the Plan recommends that the need for permanent drop-off locations at landfills or other convenient sites for household hazardous wastes be evaluated. To support these efforts, the Plan recommends continuing the public education campaign currently implemented as part of the collection program. Public education would provide information on substitute products that are less hazardous and inform the public about collection days and permanent drop-off locations for their wastes.

### **Goal**

- 6-1 To promote waste minimization, recycling, and safe management of household hazardous waste.

### **Policies**

- 6-1 The County and the cities should continue programs for the proper collection and disposition of household hazardous wastes. Programs should include collection days, permanent collection and transfer facilities, and curbside pickup, as appropriate and feasible.
- 6-2 The County and cities should expand the public education program on the safe use and minimization of household hazardous products.
- 6-3 The County and cities should evaluate and implement additional programs in order to maximize recycling of household hazardous waste.

## Implementation Programs

### 6-A Collection Programs

Continue the program for the collection and disposal of household hazardous waste. The program should include an evaluation of the on-going need for collection day events, the potential for permanent drop-off locations at landfills or other locations where wastes could be delivered on a regular basis, the feasibility of curbside pickup of waste oil and paint, and an assessment of funding sources as identified in the report prepared by CEC (Santa Barbara County, 1987). Procedures for recycling household hazardous waste should be implemented whenever possible.

The County should develop a program to encourage local industry to accept for treatment or disposal small quantities of household hazardous wastes generated by their employees.

### 6-B Education Program

The County, cities, and sanitation districts should work together to continue and expand the educational component of the collection day events. The focus of this effort is to ensure continued education on substitute household products and the hazards associated with improper storage, use, and disposal of hazardous household products. If feasible, educational information should be distributed to all households (e.g. via utility bills). The County and cities should support labeling legislation to require manufacturers of household hazardous substances to indicate proper methods of disposal on product labels.

### 6-C Recycling

Expand the program for recycling household hazardous wastes. The recycling component of the collection days should be expanded to include paint and any other waste that can feasibly be recycled. Incentives to encourage service stations to take waste oil from households should also be developed. The potential for additional programs (e.g. curbside pickup) for waste oil and paint should be evaluated and implemented if feasible.

### 6-D Waste Composition Study

A study should be conducted at selected County landfills to assess the types and amounts of hazardous wastes in the residential waste stream being disposed at municipal landfills.



## **7.0 TRANSPORTATION**

Hazardous materials and wastes are transported through the County on a daily basis. Accidental spills or releases of hazardous materials caused by vehicle accidents or defective containment can present serious public safety hazards along the roadways. Although emergency responders receive training to handle such emergencies, it is important to consider how the County can have a more active role in ensuring safe transportation of hazardous waste.

Hazardous wastes in both solid and liquid form are transported by truck out of the County to treatment, recycling, and disposal facilities, and into the County from other areas for disposal at Casmalia Resources. The County's role in the transportation of hazardous materials and wastes is limited to areas which are not preempted by state and federal law. State and federal legislation requires the proper identification of transported materials, sets minimum standards for cargo containers, and requires that hazardous wastes be tracked from the point of generation to the point of disposal. The implementation of these regulations has resulted in four methods for overseeing the transport of hazardous waste and material: the uniform manifest/shipping papers, placarding of transportation vehicles, vehicle safety inspections, and a uniform format for reporting incidents which result in a discharge of material.

Despite the County's limited role, there are several areas where local efforts and regulations could be implemented to reduce transportation risks. These areas include route designations, notification requirements, and curfews. In addition, risk reduction can also be achieved through mitigation of transportation hazards and public education.

Transportation is also a significant issue in association with the siting of hazardous waste facilities. Transportation through residential areas should be avoided and through heavily used commercial and industrial areas minimized to reduce risks. Routing guidelines could help assist transporters on route selection.

### **Goal**

- 7-1 To ensure the safe transport of hazardous wastes from the source of generation to the point of ultimate disposal.

### **Policies**

- 7-1 The County and cities should promote the strong enforcement of existing laws regarding vehicle safety, inspections, and the hazardous waste manifest system for full protection of public health and the environment.
- 7-2 The County and cities should work with other affected agencies and industries to implement risk management strategies for hazardous waste transportation in the County.

## Implementation Program

### 7-A Risk Management Guidelines

Guidelines are necessary to identify and implement risk management strategies for the transportation of hazardous materials and wastes in the County. The guidelines should be developed in cooperation with the cities, other affected jurisdictions and agencies such as the California Department of Transportation and the California Highway Patrol, and the transportation industry. Possible issues for consideration include but are not limited to the following:

1. Industry specific risk analyses such as the one being completed for transportation of gas liquids;
2. Identification of common accident locations and mitigating road improvements;
3. Avoidance of seasonal or temporary hazards (e.g. fog, floods, road construction); and
4. Other mitigating measures such as route designation, curfews, increased inspection and enforcement, notification, and safety checklists.



## **8.0 EMERGENCY RESPONSE PROCEDURES**

The use, storage, and transportation of hazardous materials and the generation, storage, and transportation of hazardous wastes have greatly increased in Santa Barbara County. These increases have resulted in a higher risk for potential hazardous materials emergencies. The increased risk of hazardous materials emergencies has resulted in greater responsibilities for both businesses handling or generating hazardous materials and hazardous wastes and agencies responding to these incidents.

Federal, state and local agencies have a role in emergency response. The federal government will usually take an advisory and coordinating role, except in cases where there is a monumental threat of a release or where the state and local agencies do not have the resources to handle the situation. The state role is mainly one of providing information, notification, cleanup, funding, and assistance. The local agencies usually provide the most comprehensive response to an emergency incident. Local agencies involved in emergency response incidents include the law enforcement, fire departments, and the County Environmental Health Division. Coordination of the response capabilities is critical to the smooth operation of an emergency response program.

Both federal and state statutes address the issue of emergency response to hazardous waste or material incidents. The Release Response Plans and Inventory Law (AB 2185/87, Ch. 6.95 of the Cal. Health and Safety Code) is the primary piece of emergency response-related legislation effecting hazardous waste generators and the County. This law requires both counties and businesses to prepare emergency response plans. The County's Area Plan provides an overview of the hazardous materials emergency response roles in the County. The Area Plan lists procedures to be followed in the event of a release and integrates information from the business plans.

### **Goal**

- 8-1 To have a comprehensive and cohesive emergency response program within the County to protect the public health and safety.

### **Policies**

- 8-1 Any land use permit for a hazardous waste generator or a hazardous waste facility shall require submittal of an emergency response plan prior to operations, if such a plan is required under Chapter 6.95 (section 25500 et seq.) of the California Health and Safety Code.
- 8-2 The County in conjunction with the cities, other agencies, and industry should continue to conduct wide-scale hazardous materials/waste emergency response exercises on a regular basis.

## Implementation Program

### 8-A Emergency Response Plans

1. Maintain a guide to preparing emergency response plans for hazardous waste generators and hazardous waste facilities.
2. Amend the Zoning Ordinance to include in both the discretionary and ministerial permitting processes, provisions for submittal of an emergency response plan prior to operations, if such a plan is required under Chapter 6.95 (Section 25500 et. seq.) of the California Health and Safety Code.



## **9.0 STORAGE OF HAZARDOUS WASTES**

Proper storage of hazardous waste is a significant component in the development of an effective hazardous waste management program; improperly stored wastes pose a risk to the environment as well as to public and safety.

Different agencies regulate the storage of wastes depending on the type of containment and the hazardous substance. Regulations and programs for hazardous material and waste can be separated into four general categories: regulations for underground storage of hazardous materials; storage regulations for hazardous waste generators; inventory reporting and emergency planning requirements; and employee training and worker right to know regulations.

The existing regulations and programs provide for the safe storage of hazardous material and waste. There are several areas, however, where better coordination and collective efforts can be made to reduce costs and improve effectiveness of the existing programs. These areas include the storage of hazardous materials in a residential areas as part of home occupations; the need for a computerized data base to assisting in coordinating efforts of different agencies and meeting the requirements of different laws; and establishing priorities for inspection and enforcement.

### **Goal**

- 9-1 To protect the public health and safety and the environment from risks posed by improper storage of hazardous materials and hazardous waste.

### **Policy**

- 9-1 The County and cities shall encourage the proper storage of hazardous materials and hazardous waste through continued inspection efforts and public education regarding proper storage methods and regulations.

### **Implementation Program**

#### **9-A Inspections**

Maintain a thorough and well-supported inspection program that would reduce costs and future liabilities associated with tank leaks, emergency spills, and fires from onsite storage of hazardous materials or wastes. To this end, the County should evaluate the need for additional personnel and funding to support the inspection programs. In addition, the program should evaluate the feasibility of consolidating inspections and fees for the various programs involved in hazardous wastes and materials storage.

## 9-B Home Occupations

1. Develop guidelines that would identify occupations which are not suited in residential areas because of the use of hazardous materials or generation of hazardous waste. The guidelines should consider the following items:
  - a. The types and quantities of hazardous materials or hazardous waste that will not be allowed in home occupations; and
  - b. The types of occupations that generally use hazardous materials or generate hazardous waste in significant quantities to be of concern.
2. Amend the zoning ordinances to implement the guidelines developed for home occupations and to require findings for the approval of home occupations.
3. Develop procedures to ensure the proper regulation of home occupations that use hazardous materials or generate hazardous waste.
4. Develop procedures to phase-out existing permitted home occupations that are not allowed under adopted guidelines.



## **10.0 CONTAMINATED SITES**

Contaminated sites are areas known to have soil, air, or groundwater contamination as a result of chemical spills, leaking underground storage tanks, leaking pipes and drums, and abandoned land fills. The most common threat of abandoned and closed sites is the potential migration of hazardous contaminants through the land to water supplies, particularly groundwater aquifers. Other problems associated with contaminated sites are toxic air emissions and improper land use in areas on or surrounding contaminated sites.

The Environmental Health Division of the County administers a site mitigation program which provides for the supervision of cleanup at contaminated sites. While the program has been effective in the cleanup of sites, additional measures could be employed to augment the program. Recommended measures include developing procedures to improve access to information on contaminated sites; investigating funding sources for the cost of cleanup; coordination of interagency efforts; the development of a program and data base for identification and mitigation of contaminated sites; the support of training efforts for cleanup; and, addressing land use issues for areas adjacent to contaminated sites.

### **Goal**

- 10-1 To protect public health and safety and the environment from risks due to the presence of abandoned or contaminated sites.

### **Policies**

- 10-1 The County and cities should work with other involved agencies to establish a coordinated interagency effort for identification, regulation, mitigation, and notification of contaminated sites.
- 10-2 The County and cities in conjunction with the State Department of Health Services shall encourage onsite treatment and remediation to reduce the transport of hazardous waste from contaminated sites.

### **Implementation Programs**

#### **10-A Contaminated Sites List**

Develop procedures to improve access to information about the condition, history, remedial action plans, status of a site, availability of site assessments, and local and state agencies with jurisdiction over contaminated sites. This should include the Site Mitigation List prepared by Environmental Health Division and the Hazardous Waste and Substances Sites List prepared by the State Office of Permit Assistance. The potential for identifying sites on the Resource Management Department LIS computer data base should be evaluated. Procedures for the notification of water districts and private well owners when a contaminated site is identified should also be developed.

## 10-B Cleanup Activities

1. Develop a program to enhance training of personnel in site assessment and mitigation techniques.
2. Investigate funding possibilities for cleanup activities. This should consider how local agencies can recover full or partial payment from responsible parties for cleanup of contaminated sites. The County should support legislation that defines the responsible party in regard to the assessment and cleanup of contaminated sites, as well as legislation that improves access to state and federal Superfunds to cleanup orphan sites.

## 10-C Surrounding Land Use

The need for an ordinance which regulates land use on and around a contaminated site should be evaluated. Existing Comprehensive Plan policies should be evaluated, and, if appropriate, new policies developed.

## 10-D Land Use Applications

Develop procedures to a) ensure that all land use permit applicants check the County Site Mitigation List and the State Hazardous Waste and Substances Sites List, and b) amend land use permit applications so that potential contaminated sites are identified as early as possible.



## **11.0**

## **PUBLIC EDUCATION AND PARTICIPATION**

Public participation and education are key elements for an effective Hazardous Waste Management Plan. A key part of the public participation and education component of the preparation of the HWMP included the formation of an Advisory Committee. The fifteen-member Advisory Committee was established by the Board of Supervisors. The HWMP Advisory Committee included representatives from the public, environmental groups, industry, and representatives from the cities in the County. The city representatives were appointed by the City Selection Committee. The Advisory Committee has held numerous public meetings and workshops since their appointments were made in July 1987. Additional public involvement efforts have consisted of public presentations to community interest groups, the preparation and distribution of brochures, the maintenance of an extensive mailing list and dissemination of information on public meetings, and the establishment of a reference section on hazardous wastes in local libraries have been a part of the public involvement effort.

Public participation is necessary throughout the planning process including implementation of the HWMP. Continued public education is recommended as a long range goal of hazardous waste management. In addition, policies that recognize the need for public involvement and a program for continuing public education efforts are recommended.

### **Goal**

- 11-1 To ensure continued public education and participation in all aspects of hazardous waste planning.

### **Policy**

- 11-1 The County and cities should develop a public education program on the proper use and disposal of hazardous wastes including methods for reducing the amount of hazardous wastes generated in the County.

### **Implementation Programs**

#### **11-A Public Education**

Public education programs should address all aspects of hazardous waste management including but not limited to waste minimization, storage, transportation, and infectious wastes. A periodic review of the public educational program should be conducted to make sure that the critical issues facing the citizens of the County are being addressed.

The program should consist of a public awareness component, educational materials, and additional components such as library displays, and brochures. The program could be developed from the efforts undertaken in the preparation of the HWMP and CEC's education program on household hazardous wastes. More detail on the suggested components is presented below.

**Brochure** - Develop brochures on how the public can be involved in hazardous waste management, the types and amounts of wastes generated in the County, and perhaps, a summary of major issues identified in the HWMP.

**Information Resources** - Establish a collection of materials on hazardous waste management issues at local libraries.

**Public Schools** - Work with local schools and the State Department of Education on an early awareness program. This program would focus on developing a curriculum package about hazardous waste issues and effective management practices.

**Public Awareness** - Provide broad coverage of hazardous waste issues by involving the media when significant events occur. Also, presentations to community interest groups on a periodic basis should be done. This effort could be combined with the duties of the Health Educator recommended in the waste minimization chapter.

#### 11-B Coordination of Educational Programs

Develop a mechanism for coordinating education programs for large quantity generators, small quantity generators, and the general public. This program would require the identification of any overlap between the different areas and would require targeting resources to the most needed groups.



## **12.0                    INFECTIOUS WASTE**

Infectious waste differs from most other hazardous wastes in that infectious waste is hazardous for a relatively short time and it usually requires a living host or specific substrate to survive. Generators of more than 100 kilograms (220 pounds) of infectious waste per month are required to have an infectious waste generator permit in Santa Barbara County. Currently, there are 48 permitted facilities. These facilities include hospitals, convalescent homes, clinics, and acute psychiatric facilities. Existing disposal methods include onsite incineration and autoclaving with subsequent disposal at the municipal landfill.

The HWMP proposes policies aimed at improving the existing infectious waste management program. These policies include amending the infectious waste management program to include generators of less than 100 kilograms per month, exploring the feasibility of siting an incineration facility for infectious wastes within the County, continue educating the public on proper management practices, and investigate the feasibility of requiring manifests for transporting infectious wastes within the County.

### **Goal**

- 12-1    To protect public health and safety and the environment from risks due to improper handling of storage, treatment and disposal practices of infectious waste.

### **Policy**

- 12-1    The County should expand the infectious waste management program to ensure the safe and effective management of infectious waste by all generators in the County.

### **Implementation Programs**

#### **12-A    Infectious Waste Control Program**

1.      Amend the Infectious Waste Ordinance to include all generators of infectious waste.
2.      Conduct a survey to determine the disposal practices and the amounts of infectious waste produced in the County. Based on this information, develop programs to ensure the safe management of infectious wastes including identifying procedures to eliminate landfilling of infectious waste.
3.      Continue efforts to educate hazardous materials response personnel, the public, and generators of infectious waste on proper management practices, including recommended treatment and disposal alternatives.
4.      The County and cities should encourage and support state or federal legislation requiring shipping manifests for infectious wastes.



## **13.0 INSPECTION, MONITORING, AND ENFORCEMENT**

The County has ongoing programs for inspection, monitoring, and enforcement of hazardous waste facilities and generators. These three components are essential to the overall management of hazardous waste. Without them, local and state governments cannot be assured that waste management practices are carried out in the safest manner. These programs also serve as a means of providing on-going regulatory information to generators.

The Environmental Health Division, Fire Department, Agricultural Commissioner, and the Air Pollution Control District are involved in inspection, monitoring, and enforcement of hazardous waste facilities and generators. The Environmental Health Division of the County has a major role in hazardous waste management. They administer the Hazardous Waste Generator program which is a comprehensive program that provides for inspection, monitoring, and the issuance of permits for hazardous waste generators.

Legislative requirements will demand that County agencies direct their effort to additional hazardous waste programs. This means that several issues must be addressed to ensure that hazardous waste programs are carried out in the most effective manner. The most critical issues involve the need for additional staff to carry out current hazardous waste legislation, the consolidation of the existing inspection programs, where feasible, and the need for education and technical assistance. The goals and policies presented below identify the need to continue existing inspection programs and the augmentation of enforcement programs.

### **Goal**

- 13-1 To protect the public health and safety and the environment by ensuring that all hazardous waste generators and facilities are operating safely and are in compliance with all appropriate local, state, and federal laws.

### **Policies**

- 13-1 The County shall continue its inspection programs and shall work toward providing technical assistance to generators on an on-going basis.
- 13-2 The County shall provide effective enforcement of appropriate local, state, and federal hazardous waste laws, and shall make reasonable efforts to work with violators in correcting the violation.

### **Implementation Program**

#### **13-A Enforcement Coordination**

Develop a program to improve local enforcement of hazardous materials and hazardous waste regulations. This should include an enforcement coordinator position in the Environmental Health Division to work with hazardous materials specialists and the District Attorney.





## **14.0 ORGANIZATIONAL RESPONSIBILITIES FOR IMPLEMENTATION**

The Hazardous Waste Management Plan (HWMP) recommends over twenty implementation programs for the management of hazardous wastes in the County. Reasonable efforts must be made to implement the programs in order to achieve the goals and policies identified in this Plan. A necessary step toward this effort is to identify where the responsibilities lie in implementation. Table 14-1 of the HWMP provides a summary of the proposed programs, grouped into primary issue areas, and the agencies responsible for implementation. This table is included after the goals, policies, and programs below.

Because staff, time, and funds are limited, priorities must be established so that the programs which best meet the needs of the County and the goals of AB 2948 take precedence. In addition, the scope of the programs must be developed to ensure efficient use of resources. These critical elements must be completed with input from the public and industry. For this reason, the goals and policies recommend the establishment of two committees and a coordinator to oversee the implementation of the proposed hazardous waste programs, develop new programs as needed, and coordinate current hazardous waste activities.

### **Goals**

- 14-1 To have a comprehensive, interagency network of programs for hazardous waste management in order to protect the health and welfare of the public, the environment, and the economy of Santa Barbara County.
- 14-2 To maximize the coordination of hazardous waste and hazardous materials programs so as to ensure that the needs of Santa Barbara County are met in the most efficient manner possible.

### **Policies**

- 14-1 The County and cities shall implement the goals, policies, and programs identified in the HWMP to improve hazardous waste management in Santa Barbara County.
- 14-2 The County shall establish a committee(s) to oversee the implementation of the HWMP programs. A staff position should be allocated for a coordinator to oversee all hazardous waste programs in the County, and to work with the HWMP committee(s).

### **Implementation Programs**

#### **14-A Funding**

Funding sources for implementation of the HWMP must be identified. Potential sources include Measure A monies (if available), program fees, user fees, state and federal grants, surcharges on solid waste fees, violation fines, and assistance from other affected agencies and districts. The County should seek an override to

Proposition 4 appropriations limitation to provide for expansion of hazardous waste programs. Other potential sources should be investigated. Existing programs and resources should be utilized as much as possible.

14-B HWMP Program Coordinator

The HWMP Program Coordinator would be responsible for overseeing the implementation of HWMP programs and the overall coordination of all hazardous material and waste management programs.

14-C HWMP Program Committees

Two committees are recommended to oversee the implementation of the proposed programs of the plan. One committee should be comprised of County representatives who will oversee the programs, establish program priorities, and determine the scope of work for the programs. A second committee should be established to provide an opportunity for input from the public, industry, and cities regarding all phases of the implementation of the HWMP programs.

HWMP\EXECSUMM.DOC



TABLE 14-1  
RECOMMENDATIONS FOR IMPLEMENTATION OF HAZARDOUS WASTE PROGRAMS

ISSUE AREA	PROGRAM	-----COUNTY DEPARTMENT-----				CITIES
		RMD*	EHD*	PW*	OOP*	
Data	2-A Comprehensive data base	X	X		X	
	5-A SQG data assessment	X	X			
	10-A Contaminated sites list	X	X			X
Siting, permitting, land use regulations	2-B Permitting- generators	X	X			X
	3-A Permitting- offsite facilities	X	X			X
	3-B Zoning- offsite facilities	X	X			X
	3-C Permitting- onsite and transportable facilities	X	X			X
	4-B Application requirements- waste minimization	X	X			X
	8-A Application requirements- emergency response plans	X	X			X
	9-B Home Occupations	X	X			X
	10-C Land use requirements- contaminated sites	X	X			X
	10-D Application requirements- contaminated sites	X	X			X
Waste minimization	4-A Waste minimization program		X			
Education	5-B SQG education		X			
	6-B Household hazardous waste education		X	X		X
	11-A Public education	X	X			X
	11-B Coordination of education		X			
Household and SQG hazardous waste collection	5-C SQG collection and transfer station	X	X	X		X
	6-A Household collection and transfer station	X	X	X		X
	6-C Household recycling	X	X	X		
	6-D Waste composition study			X		
Transportation risk management	7-A Transportation risk management guidelines	X	X	X	X	X
Expansion of existing EHD programs	9-A Storage inspections		X			
	10-B Cleanup activities		X			
	12-A Infectious waste program		X			
	13-A Enforcement coordination		X			
HWMP coordinator and committees	14-A Implementation funding	X	X	X	X	X
	14-B HWMP program coordinator		Administrative Office			
	14-C HWMP program committees	X	X	X	X	X

\* RMD - Resource Management Department  
EHD - Environmental Health Division

PW - Public Works Department  
ODP - Office of Disaster Preparedness



U.C. BERKELEY LIBRARIES



C124907184



